



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,641	10/01/2003	Steven F. Borsand	03-901	7876
20306 7590 03/18/2008 MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606				
EXAMINER KANERVO, VIRPI H				
ART UNIT 3691		PAPER NUMBER		
MAIL DATE 03/18/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/676,641

Applicant(s)

BORSAND, STEVEN F.

Examiner

VIRPI H. KANERVO

Art Unit

3691

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date ____

DETAILED ACTION

Claim Objections

1. Claims 2 and 17 are objected to under 37 CFR § 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. These claims are improper because they can conceivably be infringed without infringing the claims they reference (claims 1 and 16). Here, for example, a CD-ROM having computer executable code that if and when executed would cause a computer to do the receiving, increasing, adjusting, sending, and placing steps of claims 1 and 16. However, such a CD-ROM would **not** infringe the method steps of claims 1 and 16 since the CD-ROM itself never performs any of the active steps of entering and determining required by the method steps. MPEP § 608.01(n), III. In other words, mere possession of such a CD-ROM would infringe claims 2 and 17, but this is not enough to infringe claims 1 and 16. As a result, claims 2 and 17 are improper dependent claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. For the purpose of applying prior art, examiner will interpret claims 2 and 17 to be properly written independent claims directed to computer readable medium.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in § 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7-12, 16-17, 19, and 22-25, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nordlicht (2002/0194115 A1) in view of Englen (2003/0023505 A1).

As to claim 1, Nordlicht shows receiving a dynamic quantity order at an electronic exchange, wherein the dynamic quantity order is received in a message comprising a price and a desired order quantity (Nordlicht: page 6, ¶ 85), and wherein the order is sorted based on the price into an order queue (Nordlicht: page 6, ¶ 83); and increasing the order quantity to an increased order quantity such that a possibility of the desired order quantity getting filled is increased (Nordlicht: pages 5-6, ¶¶ 78-79). Nordlicht does not show dynamically adjusting the order quantity based on a total quantity in the order queue at the price. Englen shows dynamically adjusting the order quantity based on a total quantity in the order queue at the price (Englen: page 11, ¶ 102). It would have been

obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlich by dynamically adjusting the order quantity based on a total quantity in the order queue at the price of Englen in order to provide an incentive for consumers to purchase content (Englen: page 1, ¶ 5).

As to claim 2, Nordlich in view of Englen shows a computer readable medium having stored therein instructions to execute the method of claim 1 (Nordlich: page 1, ¶ 7).

As to claim 3, Nordlicht in view of Englen shows all the elements of claim 1. Nordlicht also shows that the order queue is processed by the electronic exchange such that orders are removed based on a pro-rata priority (Nordlicht: page 5, ¶ 78).

As to claim 4, Nordlicht in view of Englen shows all the elements of claim 3. Nordlicht does not show that when the dynamic quantity order is received at the electronic exchange, assigning a first weight parameter to the dynamic quantity order based on the desired order quantity and the total order quantity in the order queue; estimating a potential order quantity that will be filled in the order queue at the price; and increasing the quantity for the dynamic quantity order based on the estimated potential order quantity. Englen shows that when the dynamic quantity order is received at the electronic exchange, assigning a first weight

parameter to the dynamic quantity order based on the desired order quantity and the total order quantity in the order queue (Englen: pages 11-12, ¶ 102); estimating a potential order quantity that will be filled in the order queue at the price (Englen: pages 11-12, ¶ 102); and increasing the quantity for the dynamic quantity order based on the estimated potential order quantity (Englen: pages 11-12, ¶ 102). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlich by assigning a first weight parameter to the dynamic quantity order based on the desired order quantity and the total order quantity in the order queue when the dynamic quantity order is received at the electronic exchange; estimating a potential order quantity that will be filled in the order queue at the price; and increasing the quantity for the dynamic quantity order based on the estimated potential order quantity of Englen in order to provide an incentive for consumers to purchase content (Englen: page 1, ¶ 5).

As to claim 7, Nordlicht in view of Englen shows all the elements of claim 4. Nordlicht also shows that the step of estimating the potential order quantity is based on a default set by the electronic exchange (Nordlicht: page 7, ¶ 85; see "Underlying Quantity").

As to claim 8, Nordlicht in view of Englen shows all the elements of claim 4. Nordlicht does not show that when the order quantity associated with the

dynamic quantity order is increased, assigning a second weight parameter to the order, wherein the second weight parameter is determined based on the increased order quantity and a new total order quantity in the order queue at the price. Englen shows that when the order quantity associated with the dynamic quantity order is increased, assigning a second weight parameter to the order (Englen: pages 11-12, ¶ 102), wherein the second weight parameter is determined based on the increased order quantity and a new total order quantity in the order queue at the price (Englen: pages 11-12, ¶ 102). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlich by assigning a second weight parameter to the order when the order quantity associated with the dynamic quantity order is increased, wherein the second weight parameter is determined based on the increased order quantity and a new total order quantity in the order queue at the price of Englen in order to provide an incentive for consumers to purchase content (Englen: page 1, ¶ 5).

As to claim 9, Nordlicht in view of Englen shows all the elements of claim 1. Nordlicht also shows that the order quantity associated with the dynamic quantity order is increased at the electronic exchange (Nordlicht: page 6, ¶¶ 79 and 85).

As to claim 10, Nordlicht in view of Englen shows all the elements of claim 1. Nordlicht also shows detecting a filled order quantity associated with the dynamic

quantity order (Nordlicht: page 5, ¶ 78); determining that the filled order quantity is not lower than the desired order quantity of the dynamic quantity order (Nordlicht: page 6, ¶ 78); and attempting to delete a remaining order quantity associated with the increased order quantity (Nordlicht: page 6, ¶ 78).

As to claim 11, Nordlicht in view of Englen shows all the elements of claim 1. Nordlicht also shows detecting a filled order quantity associated with the dynamic quantity order (Nordlicht: page 5, ¶ 78); determining that the filled order quantity is lower than the desired order quantity of the dynamic quantity order (Nordlicht: page 6, ¶ 78); and dynamically adjusting the increased order quantity such that a possibility of a remaining portion of the desired order quantity being filled is increased (Nordlicht: pages 5-6, ¶¶ 78-79).

As to claim 12, Nordlicht in view of Englen shows all the elements of claim 11. Nordlicht also shows that the increased order quantity is dynamically adjusted based on a new order quantity in the order queue at the price (Nordlicht: page 6, ¶ 80).

As to claim 16, Nordlicht shows sending a dynamic quantity order from a client device to an electronic exchange, wherein the dynamic quantity order is sent in a message comprising a price and a desired order quantity to be filled (Nordlicht: page 6, ¶ 85); receiving the dynamic quantity order at the electronic exchange

(Nordlicht: page 5, ¶ 78); placing the dynamic quantity order in a pro-rata order queue (Nordlicht: page 6, ¶ 83); increasing the order quantity of the dynamic quantity order such that a possibility of the desired order quantity getting filled is increased (Nordlicht: pages 5-6, ¶¶ 78-79). Nordlicht does not show dynamically adjusting the increased order quantity based on a current total quantity in the order queue at the price. Englen shows dynamically adjusting the increased order quantity based on a current total quantity in the order queue at the price (Englen: page 11, ¶ 102). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlicht by dynamically adjusting the increased order quantity based on a current total quantity in the order queue at the price of Englen in order to provide an incentive for consumers to purchase content (Englen: page 1, ¶ 5).

As to claim 17, Nordlicht in view of Englen shows a computer readable medium having stored therein instructions to execute the method of claim 16 (Nordlicht: page 1, ¶ 7).

As to claim 19, Nordlicht in view of Englen shows all the elements of claim 16. Nordlicht does not show that when the dynamic quantity order is received at the electronic exchange, assigning a first weight parameter to the dynamic quantity order based on the desired order quantity and the current total available order quantity in the pro-rata order queue at the price; calculating an estimated order

quantity that will potentially be filled in the order queue at the price; and increasing the order quantity of the dynamic quantity order so that if the estimated order quantity will be filled, the desired order quantity of the dynamic quantity order will be filled. Englen shows that when the dynamic quantity order is received at the electronic exchange, assigning a first weight parameter to the dynamic quantity order based on the desired order quantity and the current total available order quantity in the pro-rata order queue at the price (Englen: pages 11-12, ¶ 102); an estimated order quantity that will potentially be filled in the order queue at the price (Englen: pages 11-12, ¶ 102); and increasing the order quantity of the dynamic quantity order so that if the estimated order quantity will be filled, the desired order quantity of the dynamic quantity order will be filled (Englen: pages 11-12, ¶ 102). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlich by assigning a first weight parameter to the dynamic quantity order based on the desired order quantity and the current total available order quantity in the pro-rata order queue at the price; an estimated order quantity that will potentially be filled in the order queue at the price; and increasing the order quantity of the dynamic quantity order so that if the estimated order quantity will be filled, the desired order quantity of the dynamic quantity order will be filled of Englen in order to provide an incentive for consumers to purchase content (Englen: page 1, ¶ 5).

As to claim 22, Nordlicht in view of Englen shows all the elements of claim 19. Nordlicht does not show assigning a second weight parameter to the order when the order quantity associated with the dynamic quantity order is increased, wherein the second weight parameter is determined based on the increased order quantity and a new current total order quantity in the order queue at the price. Englen shows assigning a second weight parameter to the order when the order quantity associated with the dynamic quantity order is increased, wherein the second weight parameter is determined based on the increased order quantity and a new current total order quantity in the order queue at the price (Englen: pages 11-12, ¶ 102). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlicht by assigning a second weight parameter to the order when the order quantity associated with the dynamic quantity order is increased, wherein the second weight parameter is determined based on the increased order quantity and a new current total order quantity in the order queue at the price. Englen shows assigning a second weight parameter to the order when the order quantity associated with the dynamic quantity order is increased, wherein the second weight parameter is determined based on the increased order quantity and a new current total order quantity in the order queue at the price of Englen in order to provide an incentive for consumers to purchase content (Englen: page 1, ¶ 5).

As to claim 23, Nordlicht in view of Englen shows all the elements of claim 16. Nordlicht also shows detecting a filled order quantity associated with the dynamic quantity order (Nordlicht: page 5, ¶ 78); determining that the filled order quantity is not lower than the desired order quantity of the dynamic quantity order (Nordlicht: page 6, ¶ 78); and attempting to delete a remaining order quantity associated with the increased order quantity (Nordlicht: page 6, ¶ 78).

As to claim 24, Nordlicht in view of Englen shows all the elements of claim 16. Nordlicht also shows detecting a filled order quantity associated with the dynamic order quantity (Nordlicht: pages 5-6, ¶ 78); determining that the filled order quantity is lower than the desired order quantity of the dynamic quantity order (Nordlicht: page 6, ¶ 78); and dynamically adjusting the increased order quantity such that the possibility of a remaining portion of the desired order quantity will be filled is increased (Nordlicht: pages 5-6, ¶¶ 78-79).

As to claim 25, Nordlicht in view of Englen shows all the elements of claim 24. Nordlicht also shows that the increased order quantity is dynamically adjusted based on a new current order quantity in the order queue at the price (Nordlicht: page 6, ¶ 80).

4. Claims 5-6, 18, and 20-21, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nordlicht in view of Englen, and further in view of Drolet (2002/0147622 A1).

As to claim 5, Nordlicht in view of Englen shows all the elements of claim 4. Nordlicht in view of Englen does not show that the dynamic quantity order further comprises a percentage associated with an estimated order quantity that will be filled in the order queue. Drolet shows that the dynamic quantity order further comprises a percentage associated with an estimated order quantity that will be filled in the order queue (Drolet: page 5, ¶ 62). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlicht in view of Englen by the dynamic quantity order further comprising a percentage associated with an estimated order quantity that will be filled in the order queue of Drolet in order to improve market efficiency (Drolet: page 1, ¶ 12).

As to claim 6, Nordlicht in view of Englen, and further in view of Drolet, shows all the elements of claim 5. Nordlicht in view of Englen does not show that the step of estimating the potential order quantity is based on the percentage. Drolet shows that the step of estimating the potential order quantity is based on the percentage (Drolet: page 5, ¶ 62). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of

Nordlicht in view of Englen by the step of estimating the potential order quantity being based on the percentage of Drolet in order to improve market efficiency (Drolet: page 1, ¶ 12).

As to claim 18, Nordlicht in view of Englen shows all the elements of claim 16. Nordlicht in view of Englen does not show that the dynamic order quantity further comprises a percentage associated with the estimated order quantity that will potentially be filled. Drolet shows that the dynamic order quantity further comprises a percentage associated with the estimated order quantity that will potentially be filled (Drolet: page 5, ¶ 62). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlicht in view of Englen by the dynamic order quantity further comprising a percentage associated with the estimated order quantity that will potentially be filled of Drolet in order to improve market efficiency (Drolet: page 1, ¶ 12).

As to claim 20, Nordlicht in view of Englen shows all the elements of claim 19. Nordlicht in view of Englen does not show that the dynamic quantity order further comprises a percentage associated with an estimate of the order quantity that will be filled. Drolet shows that the dynamic quantity order further comprises a percentage associated with an estimate of the order quantity that will be filled (Drolet: page 5, ¶ 62). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlicht in view of

Englen by the dynamic quantity order further comprising a percentage associated with an estimate of the order quantity that will be filled of Drolet in order to improve market efficiency (Drolet: page 1, ¶ 12).

As to claim 21, Nordlicht in view of Englen, and further in view of Drolet, shows all the elements of claim 20. Nordlicht in view of Englen does not show that the step of calculating is further based on the percentage. Drolet shows that the step of calculating is further based on the percentage (Drolet: page 5, ¶ 62). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlicht in view of Englen by the step of calculating being further based on the percentage of Drolet in order to improve market efficiency (Drolet: page 1, ¶ 12).

5. Claims 13-15 and 26-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nordlicht in view of Englen, and further in view of Hsu (2002/0186826 A1).

As to claim 13, Nordlicht in view of Englen shows all the elements of claim 1. Nordlicht in view of Englen does not show applying a fee to be paid by a trader associated with the order for increasing the order quantity. Hsu shows applying a fee to be paid by a trader associated with the order for increasing the order quantity (Hsu: page 1, ¶ 2). It would have been obvious to one of ordinary skill in

the art at the time of the invention to have modified the method of Nordlicht in view of Englen by applying a fee to be paid by a trader associated with the order for increasing the order quantity of Hsu in order to increase the revenues of the service provider (Hsu: page 1, ¶ 2).

As to claim 14, Nordlicht in view of Englen, and further in view of Hsu, shows all the elements of claim 13. Nordlicht in view of Englen does not show that at least a portion of the fee is to be paid to the electronic exchange. Hsu shows that at least a portion of the fee is to be paid to the electronic exchange (Hsu: page 1, ¶ 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlicht in view of Englen by at least a portion of the fee being paid to the electronic exchange of Hsu in order to increase the revenues of the service provider (Hsu: page 1, ¶ 2).

As to claim 15, Nordlicht in view of Englen, and further in view of Hsu, shows all the elements of claim 13. Nordlicht also shows that at least a portion of the order quantity is filled (Nordlicht: page 5, ¶ 78).

As to claim 26, Nordlicht in view of Englen shows all the elements of claim 16. Nordlicht in view of Englen does not show applying a fee to be paid by a trader associated with the dynamic quantity order. Hsu shows applying a fee to be paid by a trader associated with the dynamic quantity order (Hsu: page 1, ¶ 2). It

would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Nordlicht in view of Englen by applying a fee to be paid by a trader associated with the dynamic quantity order of Hsu in order to increase the revenues of the service provider (Hsu: page 1, ¶ 2).

As to claim 27, Nordlicht in view of Englen, and further in view of Hsu, shows all the elements of claim 26. Nordlicht also shows that the fee is to be paid when at least a portion of the order quantity associated with the dynamic quantity order is filled (Nordlicht: page 5, ¶ 78).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Arazi (2006/0173693 A1) discloses computerized trading system and method useful therefor.

Buist (6,408,282 B1) discloses system and method for conducting securities transaction over a computer network.

Burns (2004/0093300 A1) discloses method, apparatus and interface for trading multiple tradable objects.

Finebaum (2002/0156719 A1) discloses method and apparatus for trading bonds.

Glodjo (7,130,789 B2) disclose global electronic trading system.

Howorka (2002/0099647 A1) discloses deal matching in an anonymous trading system.

Kamiya (2003/0046220 A1) discloses apparatus, method and program for supporting trade transaction.

Keith (2001/0051909 A1) discloses market program for interacting with trading programs on a platform.

Takahashi (2003/0014308 A1) discloses method and apparatus for electronic commerce in electronic marketplace.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is (571)272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Virpi H. Kanervo

/Alexander Kalinowski/

Supervisory Patent Examiner, Art Unit 3691